

Service Manual

Auto Washer

Model: DWF-805M



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Contents

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1. SPECIFICATIONS	2
2. STRUCTURE OF THE WASHING MACHINE	3
3. DIRECTIONS FOR INSTALLATION AND USE	4
INSTALLATION OF THE UNDER BASE COVER	4
HOW TO INSTALL ON AN INCLINED PLACE	
HOW TO CONNECT THE INLET HOSE	
HOW TO CLEAN THE FILTER	6
4. FEATURE AND TECHNICAL EXPLANATION	7
FEATURE OF THE WASHING MACHINE	7
WATER CURRENT TO ADJUST THE UNBALANCED LOAD	7
FUNCTION FOR SOAK WASH	7
AUTOMATIC WATER SUPPLY SYSTEM FOR BLANKET WASH	
FUNCTION PRINCIPLE OF BUBBLE WASHING MACHINE	8
AUTOMATIC DRAINING TIME ADJUSTMENT	
AUTOMATIC UNBALANCE ADJUSTMENT	
CIRCULATING-WATER COURSE AND LINT FILTER	
LINT FILTER	10
RESIDUAL TIME DISPLAY	10
DRAIN MOTOR	10

5. PRESENTATION OF THE P.C.B ASS'Y	1	1
APPENDIX		
WIRING DIAGRAM	1:	2
PARTS DIAGRAM		3
PARTS LIST		6
CIDCUIT DIACDAM	4	_

1. SPECIFICATIONS

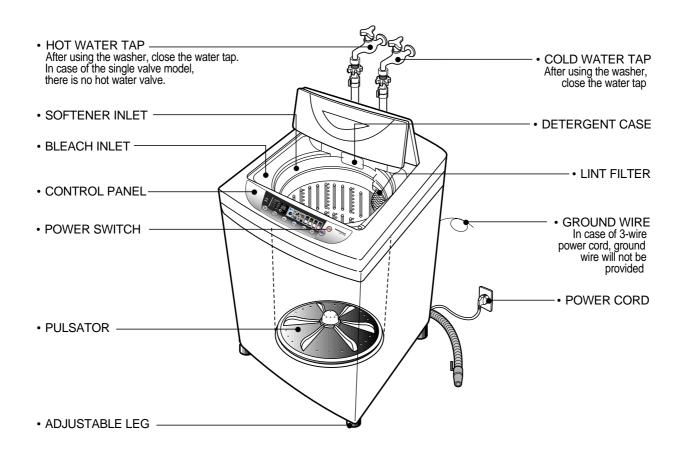
NO.	D. ITEM DWF-805M			
1	POWER SOURCE		AVAILABLE IN ALL LOCAL A	AC VOLTAGE AND CYCLE
	DOWED CONCUMPTION		50Hz	430W
2	POWER CONSUM	PHON	60Hz	530W
3	MACHINE WEIGH	т		
	White wells in	•	PUMP	43Kg
4	DIMENSION (WXH)	XD)	598 X 950	6 X 643
5	WASHING COURS	E	FULL AUTOMAT	
			(NORMAL, BLANKET, EC	CONOMY, SUIT, SOAK)
6	WATER CONSUMP	TION	207	L
			HIGH	88 L
	WATER LEVEL OF	FOTOD	MEDIUM	75 L
7	WATER LEVEL SEI	LECTOR	LOW	61 L
			SMALL	48 L
8	OPERATING WATER PRESSURE		0.3kgf/cm ² ~8kgf/cm ² (2	.94 N/cm ² ~78.4N/cm ²)
	REVOLUTION	50Hz	WASH: 125 - 140 RPM,	SPIN: 640 - 675 RPM
9	PER MINUTE	60Hz	WASH: 130 - 150 RPM,	SPIN: 710-140 RPM
10	PULSATOR		6 WINGS (Ø376mm)
11	WATER LEVEL CO	NTROL	ELECTRONIC	AL SENSOR
12	GEAR MECHANISM	M ASS'Y	HELICAL	. GEAR
13	LINT FILTER		0	
14	SOFTENER INLET		0	
15	FUNCTION OF SO	AK WASH	0	
16	ALARM SIGNAL		0	
17	RESIDUAL TIME D	ISPLAY	0	
18	AUTO. WATER SUF	PPLY	0	
19	FUNCTION OF RAI	DICAL AND BUBBLE	0	
20	AUTO RE-FEED W	ATER	0	
21	AUTO POWER OF	=	0	

2. STRUCTURE OF THE WASHING MACHINE

The parts and features of your washer are illustrated on this page. Become familiar with all parts and features before using your washer.

NOTE

• The drawing in this book may vary from your washer model. They are designed to show the different features of all models covered by this book, Your model may not include all features.



Accessories

DRYTEN	COVER UNDER [OPTION]	WATER TAP ADAPTER	INLET HOSE
RESIDENCE OF THE PARTY OF THE P	3611402711		
HOSE DRAIN [FOR PUMP]	HOSE DRAIN CLAMP	HOSE DRAIN[FOR NONPUMP]	CONNECTOR INLET [OPTION]
201221000			
361321880		3613213500	

3. DIRECTIONS FOR INSTALLATION AND USE

INSTALLING PLACE

Install the washer on a horizontal solid floor. If the washer is installed on an unsuitable floor, it could make considerable noise and vibration.



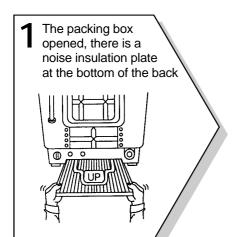


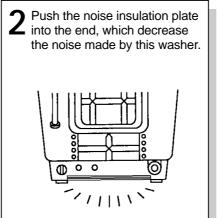
Keep the machine body more than 25cm apart from the wall surface. It will make easy cleaning the drain filter which is equipped at the back side of it. And if it comes into contract vibration may occur.

Never install in these places

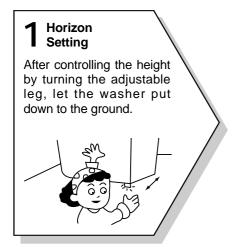
- The place where it would be exposed to direct sunlight.
- i The place nearby a heater or heat appliance.
- i The place where it would be supposed to be frozen in winter.
- The kitchen with coal gas and a damp place like a bathroom.

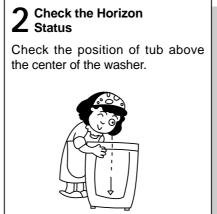
INSTALLATION OF THE UNDER BASE COVER [OPTION]





S HOW TO INSTALL ON AN INCLINED PLACE







NOTES

The openings must not be obstructed by carpeting when the washing machine is installed on a carpeted floor.

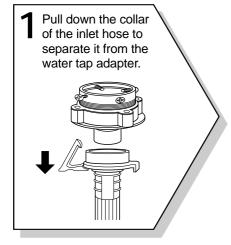
S HOW TO CONNECT THE INLET HOSE

Be careful not to mistake in supplying between the hot(maximum: 50°C) and cold water.

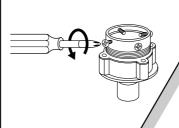
In using only one water tap or in case of attached one water inlet valve, connect the inlet hose to the cold water inlet valve.

Do not over tighten: this could cause damage to couplings.

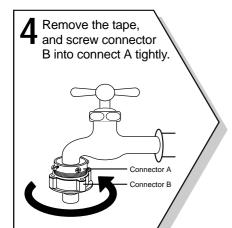
• • • • FOR ORDINARY TAP



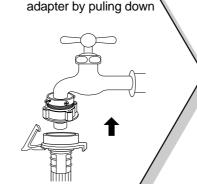
2 Loosen the four screws at the water tap adapter, but don't loosen the screws until they are separated from the water tap adapter.



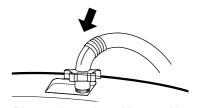
Connect the water tap adapter to the water tap tighten the four screws evenly while pushing up the adapter so that the rubber packing can stick to the water tap tightly.



5 Connect the inlet hose to the water tap adapter by puling down

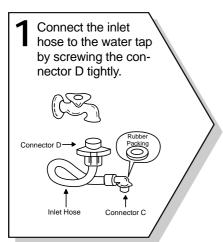


6 Connect the inlet hose adapter of the hose to the water inlet of the washer by turning it clockwise to be fixed tightly.

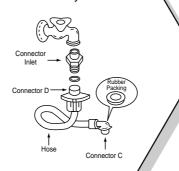


 Please check the rubber packing inside the inlet hose adapter of the hose.

• • • • FOR SCREW-SHAPED TAP



2 Connect the connector-inlet supplied if necessary.



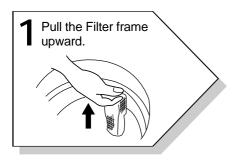
3 Insert the inlet hose adapter into the water inlet of a washer and turn it to be fixed.

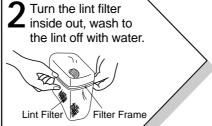


Assert the packing in the inlet

S HOW TO CLEAN THE FILTER

• • • • CLEANING THE LINT FILTER





Return the filter as it was, and insert the filter frame into the slot.

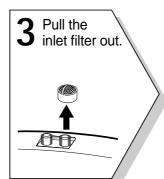
•••• CLEANING THE WATER INLET FILTER

• Clean the filter when water leaks from, the water inlet.



Turn off the water supply to the washer and sperate the inlet hose.

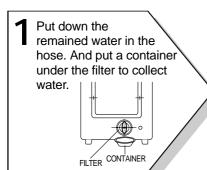


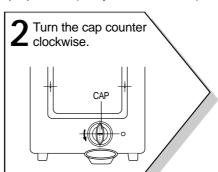


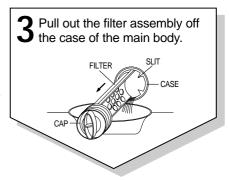


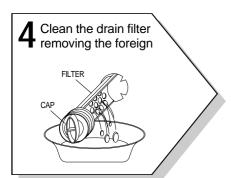
•••• CLEANING THE DRAIN FILTER

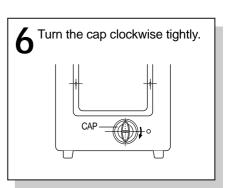
- In case "U" shape drain hose, this filter's equipped at the back side of washer.
- This drain filter is to screen the foreign stuffs such as threads, coins, pins, buttons etc ...
- If the drain filter is not cleaned at proper time (every 10 times of use), Drain problem could be caused.











4. FEATURE AND TECHNICAL EXPLANATION

FEATURE OF THE WASHING MACHINE

- 1 The first applying Radical Technology in the world....go beyond washing, sterilize your clothes and deodorize a bad smell.(optional function)
- (2) The first air bubble washing system in the world.
- (3) Quiet washing through the innovational low-noise design.
- (4) The wash effectiveness is much more enhanced because of the air bubble washing system.
- (5) The laundry detergent dissolves well in water because of the air bubble washing system.
- (6) The adoption of the water currents to adjust the unbalanced load.
- (7) One-touch operation system.

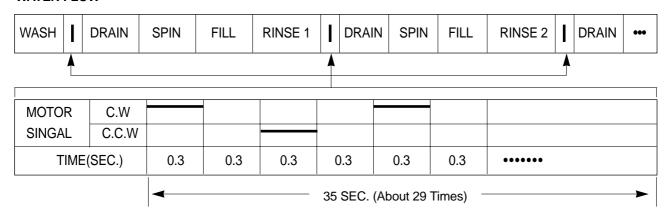
WATER CURRENT TO ADJUST THE UNBALANCED LOAD

It is a function to prevent eccentricity of the clothes after wash by rotating pulsator C.W and C.C.W for 35 seconds.(But, the SUIT course have no operation of the water currents to adjust the unbalnced load.)

EFFECT

It reduces vibration and noise effectively while spinning.

WATER FLOW

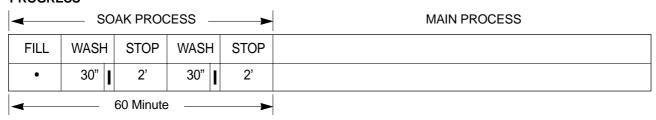


FUNCTION FOR SOAK WASH

DISPLAY THE RESIDUAL TIME

When the SOAK WASH is selected, the total wash time increases because 60 minutes for soak process are added to the time of main process.

PROGRESS





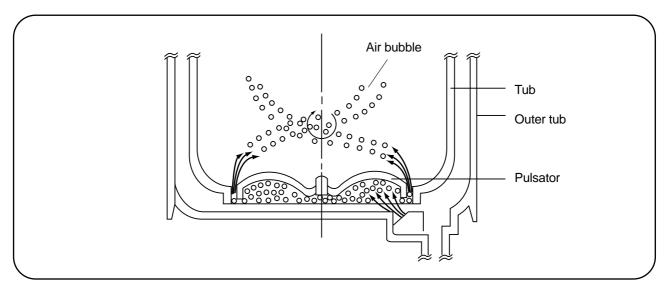
' I' mark indicates the operation of the water currents to adjust the unbalanced load.

AUTOMATIC WATER SUPPLY SYSTEM FOR BLANKET WASH

The water level would be lowered because the blanket absorbs water at the beginning of washing. Therefore, after 2 minutes, the operation is interrupted to check the water level, and then the water is supplied again until the selected water level is reached.

FUNCTIONAL PRINCIPLE OF BUBBLE WASHING MACHINE

ACROSS SECTION



FUNCTIONAL PRINCIPLE

Bubble Motor supplies the air from the bottom of outer tub to the inner space of pulsator, the air is dispersed by the rotation of pulsator. Air-bubble is created by the centrifugal force, and rises up.

AUTOMATIC DRAINNING TIME ADJUSTMENT

This system adjusts the draining time automatically according to the draining condition.

Draining condition Good draining Bad draining No draining		The washer begins spin process after drainage.		
		Draininig time is prolonged.		
		Program is stopped and gives the alarm.		

FUNCTIONAL PRINCIPLE

1 The micom can remember the time from the begining of drain to reset point when the pressure switch reaches to "OFF" point

Drain Time	Movement of the Program			
Less than	Continue draining			
15 minutes	Continue draining			
More than	Program stops and gives the alarm with $\mathbf{H}_{\mathbf{E}}$ blinked on display lamp.			
15 minutes	Program stops and gives the alarm with the billined on display lamp.			

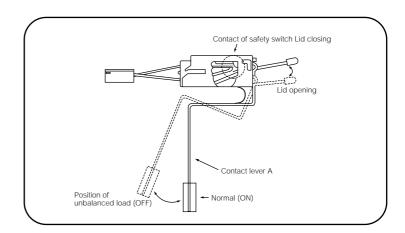
(2) In case of continuous draining	g, residual drain time is determined by micom.
Draining time as a whole = D +	90
	Residual drain time.
	The time remembered by micom

AUTOMATIC UNBALANCE ADJUSTMENT

This system is to prevent abnormal vibration during intermittent spin and spin process.

FUNCTIONAL PRINCIPLE

- 1) When the lid is closed, the safety switch contact is "ON" position.
- (2) In case that wash loads get uneven during spin, the outer tub hits the safety switch due to the serious vibration, and the spin process is interrupted.
- (3) In case that P.C.B. ASS'Y gets "OFF" signal from the safety switch, spin process are stopped and rinse process is started automatically by P.C.B. ASS'Y.
- 4 If the safety switch is operated due to the unbalance of the tub, the program is stopped and the alarm is given.





NOTES

The alarm finished when you close the lid after opening it. Check the unbalance of the wash load and the installation condition.

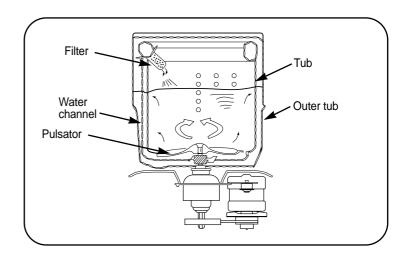
CIRCULATING-WATER COURSE AND LINT FILTER

CIRCULATING-WATER

The washing and rinsing effects have been improved by adopting the water system in which water in the tub is circulated in a designed pattern.

When the pulsator rotates during the washing or rinsing process, the water below the pulsator fans creates a water currents as shown in figure.

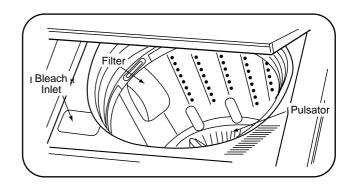
The water is then discharged from the upper part of the tub through the water channel. About 40 L/min. water is circulated at the 'high' water level, standard wash load and standard water currents.



LINT FILTER

Much lint may be obtained according to the kind of clothes to be washed and some of the lint may also sticks to the clothes.

To minimize this possibility a lint filter is provided on the upper part of the tub to filter the wash water as it is discharged from the water channel. It is good to use the lint filter during washing.



HOW TO REPLACE LINT FILTER

- 1 Pull the filter frame upward.
- (2) Turn the lint filter inside out, and wash the lint off with water.
- (3) Return the filter as it was, and fix the filter frame to the slot.

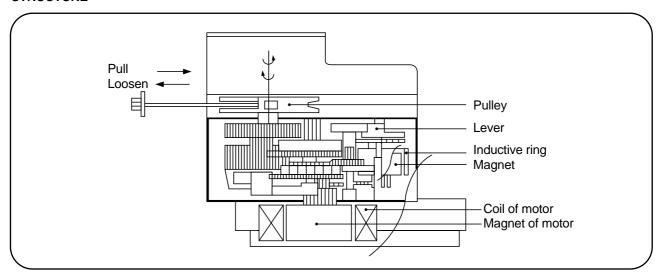
RESIDUAL TIME DISPLAY

When the START/HOLD button is pressed, the residual time (min.) is displayed on the time indicator, and it will be counted down according to process.

When operation is finished, the TIME INDICATOR will light up $\mathbf{\Pi}$.

DRAIN MOTOR

STRUCTURE



FUNCTIONAL PRINCIPLE

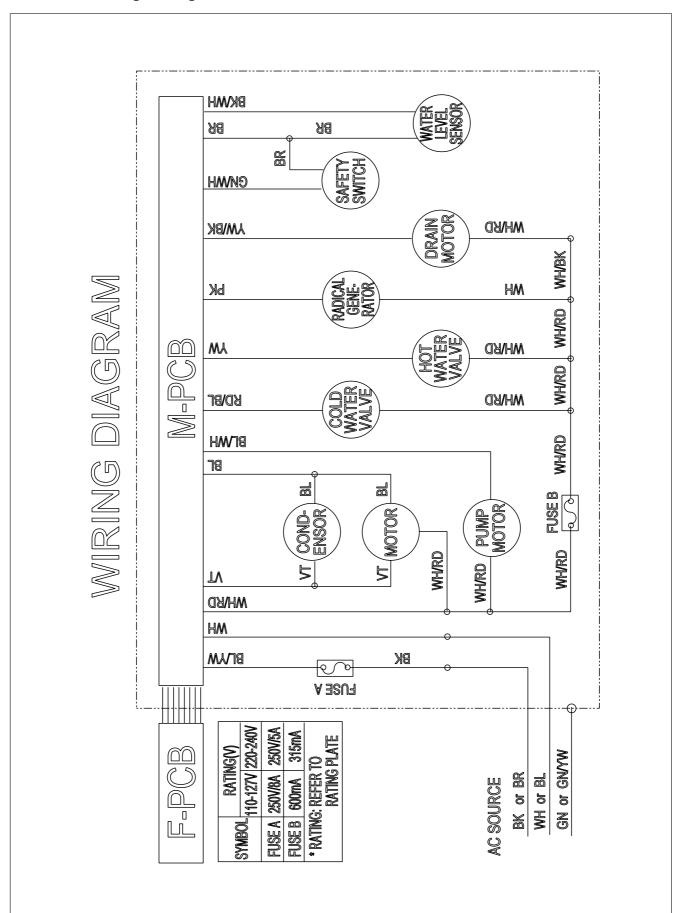
- 1) When the DRAIN MOTOR connected to the power source, the DRAIN MOTOR rotates with 900 r.p.m and revolves the pulley by gear assembly for reducing.
- (2) When the pulley is rotated, the pulley winds the wire to open the drain valve.
- 3 Therefore, rotation of pulley changed to the linear moving of wire.
- (4) The wire pulls the brake lever of Gear Mechanism Ass'y within 5 seconds.
- (5) After the wire pulled, gear assembly is separated from motor and condition of pulling is held by operation of the lever.
- (6) When the power is turned off, the drain valve is closed because the wire returns to original position.

5. PRESENTATION OF THE P.C.B ASS'Y

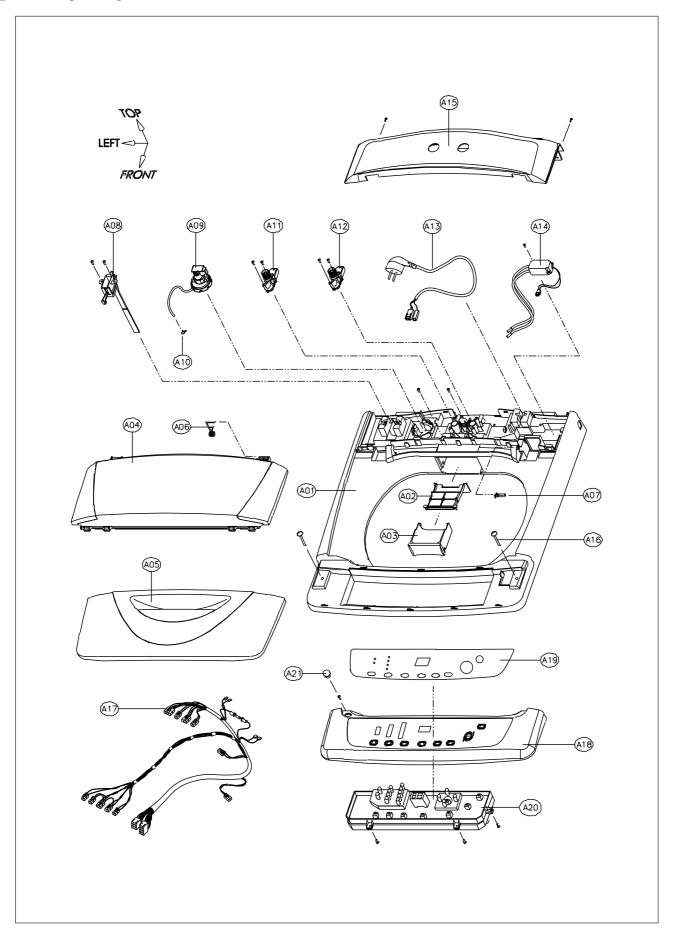
CONCERNING ERROR MESSAGE

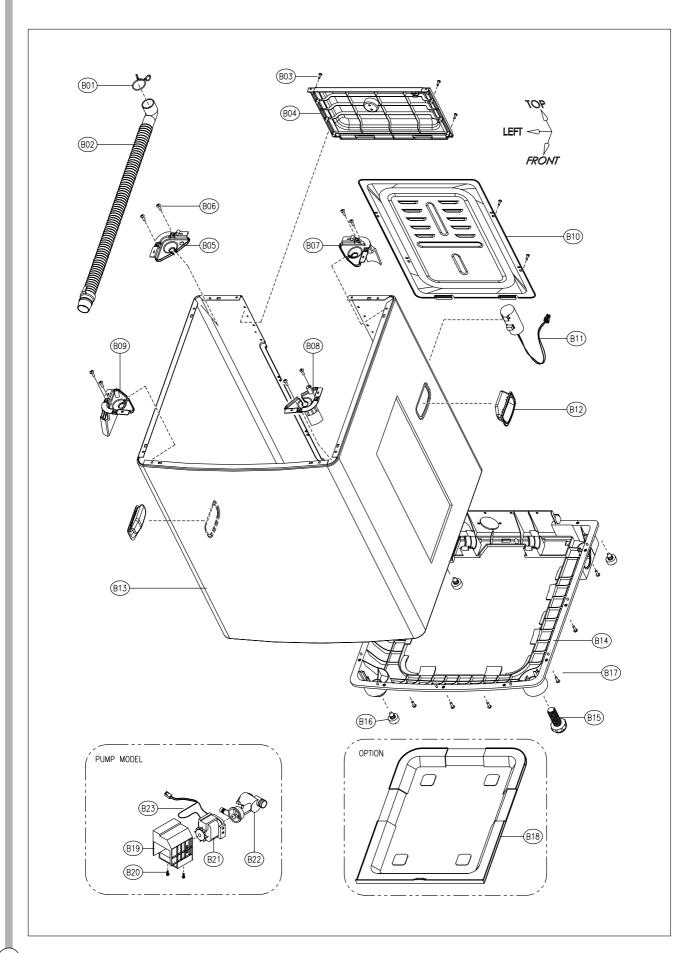
MESSAGE	CAUSE	SOLUTION
	Improper installation of drain hose.	Install drain hose properly.
SE	The drain hose is blocked up by foreign matter.	Remove foreign matter from drain hose.
	Drain motor is inferior.	Change drain motor.
	The water tap is closed.	Open the water tap.
IE	The water inlet filter clogged.	Clean the water inlet filter.
	It passes over the 60 minutes, yet it doesn't come to assigned water level.	Check whether or not is comes to the assigned water level.
	Wash loads get uneven during spin.	Re-set wash loads evenly.
LIE	Poor installation of the unit.	Proper installation.
LE	The lid is opened.	Close the lid.
ムニ	The safety switch is inferior.	Change the safety switch.
EB	The load sensing is inferior. After the load sensing operates about 7 seconds, the message is displayed during 0.5 second and water level is always fixed 'high'.	Change the P.C.B. ASS'Y.
EB	The water level sensing is inferior.	Check the water level sensor and the contact part of the connector.

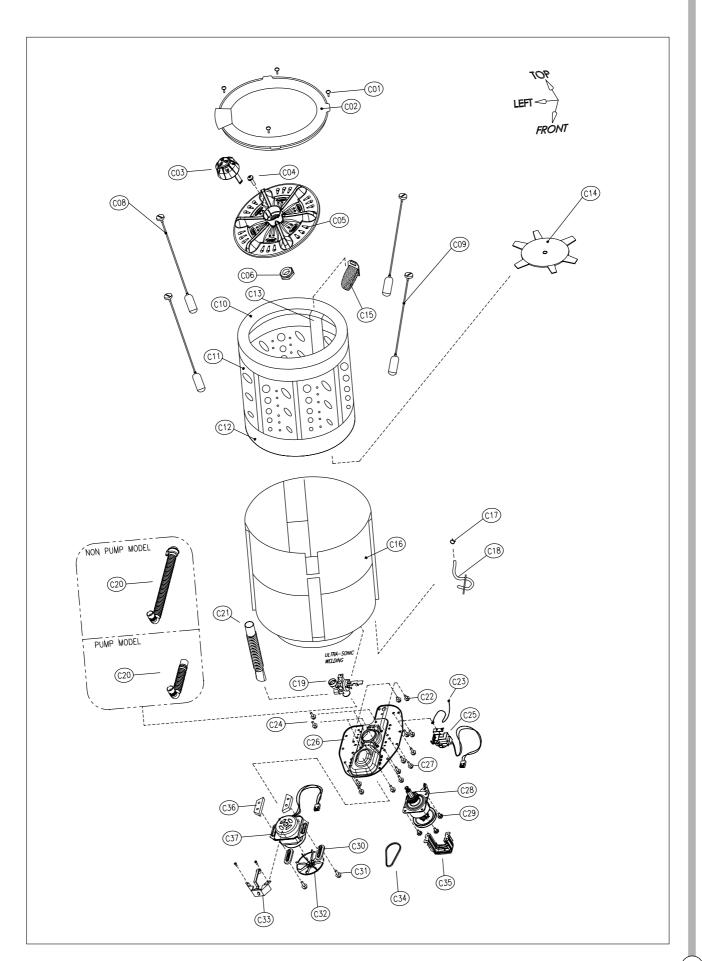
S APPENDIX [PUMP]



PARTS DIAGRAM







S PARTS LIST

NO.	PART NAME	PARTCORD	SPECIFICATION	Q _i TIY	NOTE
A01	PLATE T	3614519300	PP	1	
A02	NOZZLE DETERGENT	3618102400	PP	1	
A03	CASE DETERGENT	3611119600	PP	1	
A04	DOOR B AS	3611798900	ABS	1	
A05	DOOR F AS	3611799000	ABS	1	
A06	SPRING	3615111200	DWF-850M, D=2.0	1	
A07	HINGE DOOR	3612902400	POLYACETAL	1	
A08	SWITCH SAFETY				
		3619003171	SF-030A3, CU/T=14, #187	1	
				7	
A09	SENSOR PRESSURE AS	3614802321	CDL-D04N	1	
A10	CLAMP	4507D08150	MFZN HOSE ID=Ø7	1	
A11	VALVE INLET(H)			1	
		3615403811	AC220-240V/50Hz 270°	7 '	
A12	VALVE INLET(C)				
		3615403731	AC220-240V/50Hz 90°	7	
				7	
A13	POWER CORD AS	3611302820	A-VCTFK 2X0.75 2.3M BK	1	TAIWAN
		3611304610	N LFC-3R 3X0.752.3M GY	7	AUSTRALIA
		3611304710	F H05W 3X0.75 2.3M WH	7	CHILE
		3611304810	RW-300/500 3X0.75 2.3M		CHINA
		3611304910	VCTF 3X0.75 2.3M		INDIA
		3611305310	H05W-F 3X0.75 2.3M WH		MALAYSIA
		3611305410	H05W-F 3X0.75 2.3M BK		SINGAPOLE
		3611305810	H05W-F 3X0.75 2.3M GY		SOUTH AFRICA
		3611305610	F H05W 3X0.75 2.3M BK		USSR
		3611306030	H05W-F 3X0.75 2.3M GY		ARGENTINA
		3611305110	3X0.75 2.3M		KOREA
A14	ASSY RADICAL GENERATOR	36100E2E11	100VSNH, 100-110, 806, L700	1	
A15	PANEL B	3614231100	3614237900 ABS	1	
A16	SCREW TAPPING	7112503011	T1S TRS 5X30 MFZN	2	
A17	HARNESS AS	3612789880	220V, PUMP, DUAL VALVE		
		3612789890	220V, PUMP, DUAL VALVE		
A18	PANEL F	3614237800	ABS	1	
A19	DECORATOR PANEL F	3611620700	PC FILM/3M	1	

NO.	PART NAME	PARTCORD	SPECIFICATION	Q¡ŦIY	NOTE
A20	PCB AS				
		PRPSSWXC32	220V, PUMP, DUAL VALVE		WITHOUT RADICAL FUNCTION
A21	CAP REAR	3610902600	CR	1	
B01	CLAMP	3010902000	CK	1	
וטטו	CLAIVII	3611202200	HSW3 PE-LD		PUMP
B02	HOSE DRAIN O AS	3011202200	HOWST E EB		1 Olvii
D02	TIOOL BIVING O'NO	3613208600	PE-LD/EVA, L=1600MM		PUMP
B03	SCREW TAPPING	7122401211	TRS 4X12 MFZN	4	
B04	PLATE UPPER	3614519400	PP	1	
B05	SUPPORTER TUB BL	3615302931	FRPP(5203G6)	1	
B06	SCREW TAPPING	7112401211	T1 TRS 4X12 MFZN	8	
B07	SUPPORTER TUB BR	3615302921	FRPP(5203G6)	1	
B08	SUPPORTER TUB FR	3615302901	FRPP(5203G6)	1	
B09	SUPPORTER TUB FL	3615302911	FRPP(5203G6)	1	
B10	COVER B	3611414010	372X508X0.4T SGCC	1	
B11	ASSY CONDENSER			1	
		3618921000	13.5uF+60uH L=470 #250		220V/50HZ,60Hz
		3618921000	13.5uF+60uH L=470 #250		220V/50HZ,60Hz
B12	HANDEL CABINET	3612603300	PP	2	
B13	CABINET AS	3610809501	PAINTING(0.6)	1	
	BASE U AS	3610388700	850M	1	
B14	BASE U	3610388300	PP COREW (4*4.4)	1	
B15	LEG ADJUST AS	3617702200	SCREW (4*14)	1	
B16 B17	LEG FIX SCREW TAPPING	3617702300 7112401211	THERMAL PLASTIC ELASTOM T1 TRS 4X12 MFZN	3 12	
B18	COVER UNDER	3611402711	PP-M/B	12	
B19	COVER PUMP	3611405320	PP(B360F)	1	
פום	OOVERT OWN	3611405301	UL/CSA(466FWU, HFH-400)	- '	
B20	SCREW TAPPING	7112501611	T1 TRS 5X16 MFZN	2	
B21	MOTOR SHADED POLE	7112001011	THE SAME LIVE	1	
				†	
		3618957250	AC 220V/50Hz		
				†	
B22	FILTER AS	3611901530	DWF-5591DPNF E-TYPE	1	

[17]

NO.	PART NAME	PARTCORD	SPECIFICATION	Q¡ŦIY	NOTE
C01	SCREW TAPPING	7122401611	T2S TRS 4X16 MFZN	4	
C02	COVER TUB O	3611408500	PP	1	
C03	CAP PULSATOR	3610910600	PP	1	
C04	SPECIAL SCREW	4505E3203A	SUS 6X26.5	1	
C05	PULSATOR AS	3619705802	PP DWF-850M	1	
C06	SPECIAL NUT	4507D83080	SUS 304	1	
C08	SUSPENSION AS	3619805600	SP=120, LD=606	2	WHITE
C09	SUSPENSION AS	3619805700	SP=111, LD=606	2	BLUE
C10	BALANCER AS	3616105500	850M	1	
C11	TUBI	3618816200	SUS	1	
C12	TUB U	3618816101	PP-M/B	1	
C13	GUIDE FILTER AS	3612508300	850M	2	
		3612508400	850M	1	
C14	FLANGE TUB	3612701200	10KG, 3-FOOT	1	
C15	FILTER AS	4505E82002	PP 94'S(74X130X130)	2	
C16	TUB O	3618802630	PP	1	
C18	HOSE	4500D08210	ID=4.0	1	
C19	VALVE DRAIN AS	3615408400	100M	1	ONLY NON PUMP
C20	HOSE DRAIN I AS				
		3613212100	LDPE+EVA L=184	1	PUMP
C21	HOSE OVERFLOW	3613208901	PE-LD L=280mm	1	NON PUMP
C22	SPECIAL BOLT	7341601611	6B-16X16 MFZN	2	
C23	HARNESS EARTHINNER	3612757010	L=560mm	1	
C24	SPECIAL SCREW	3616006900	SCM24H 6.5X18	4	
C25	MOTOR SYNCHRONOUS			1	
		3966010220	220-240V/50, 60HZ L=450		
C26	BASE	3610387400	SECEN 2.0T 1		
C27	SPECIAL SCREW	3616007000	SCM24H 6.5X24	12	
C28	GEAR MECHANISM	3617307610	GM-1300-KS6P0	1	
C29	BOLT HEX	7341801511	6B-1 8X15 MFZN	4	
C31	BOLT HEX	7650802011	6B-1 8X20 PW(2X25) MFZN	2	
C32	PULLEY MOTOR AS	3618401420	M-TYPE DS=10 DP=48.5	1	60 Hz
		4507D20011			
C33	BODY BUBBLE AS	3610402901	98SERIES, HOSE L=780mm	1	
C34	BELT V				
		3616590230	M21, AGING		50Hz
C35	PROTECTOR GEAR	3618301300	SBHG 1.6T	1	
C36	CUSHON DOWN	3611502700	POM 8mm	2	
C37	MOTOR CONDENSER			1	
		3964311311	220-240V/50Hz W1D46VA012-S	-	220-240V/50Hz

CIRCUIT DIAGRAM[PUMP, DUAL VALVE]

